

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

Work Order ID 140901

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140901

Page 2

Item ID: 646.4001

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/19/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty DAS 27 9-89	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001								
	Location: _____								
		<i>Sold</i>							
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

FEB 17 2016

FEB 17 2016

FEB 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Page 1

Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM IPP
REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

646.3301		Manufactured	No				Each	5.0000		1			
646 3301									**				
Upper Cutter Assy													

J

Location	Loc Qty	Loc Code
cck018	5	
136497	2	
140115	3	

DAS 6 9-89

JAN 26 2016

646.3001		Manufactured	No				Each	0.0000		1			
----------	--	--------------	----	--	--	--	------	--------	--	---	--	--	--

646 3001

Lower Cutter Assy

J

140855

DAS 6 9-89

FEB 10 2016

646.2910		Manufactured	No				Each	3.0000		1			
----------	--	--------------	----	--	--	--	------	--------	--	---	--	--	--

646 2910

Deflector

J

Location	Loc Qty	Loc Code
CCK050	3	
136136	3	

DAS 6 9-89
JAN 26 2016

646.3810		Manufactured	No				Each	0.0000		2			
----------	--	--------------	----	--	--	--	------	--------	--	---	--	--	--

646 3810

Bracket

J

140151

FEB 05 2016

646.3510		Manufactured	No				Each	1.0000		1			
----------	--	--------------	----	--	--	--	------	--------	--	---	--	--	--

646 3510

Strut

J

Location	Loc Qty	Loc Code
cck104	1	
136114	1	

DAS 6 9-89
FEB 03 2016

140061

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

646.3511 Manufactured No

Each 0.0000

646 3511

Strut

647.0112 Manufactured No

Each 65.0000

647 0112

Strut Bracket

Location

Loc Qty

Loc Code

CCK107

65

M130388

65

647.7703 Manufactured No

Each 10.0000

647 7703

Strut Assembly

Location

Loc Qty

Loc Code

CCK114

10

139295

10

NAS1149F0332P Purchased No

Each 1,333.000

NAS1149F0332P

Washer

Location

Loc Qty

Loc Code

GA

458

m133709

458

ST262

875

m133709

75

m133938

800

DAS
6
9-89

DAS
6
9-89
FEB 03 2016

DAS
6
9-89

DAS
6
9-89

DAS
6
9-89

JAN 26 2016

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

Each

2,836.000

61

MS21042L3

Nut

DAS 6 9-89

Location

Loc Qty

Loc Code

CCK007

2000

m134039

2000

FP001

163

m133790

163

GA

195

m133790

195

ST304

478

m133790

478

Each

3.0000

1

646.3110

Manufactured

No

646 3110

Channel

DAS 6 9-89

Location

Loc Qty

Loc Code

cck020

3

136492

3

Each

10.0000

1

646.3710

Manufactured

No

646 3710

Doubler

DAS 6 9-89

Location

Loc Qty

Loc Code

CCK002

10

127550

10

Each

5.0000

1

646.3210

Manufactured

No

646 3210

Support

DAS 6 9-89

Location

Loc Qty

Loc Code

cck020

5

136217

5

Picklist Print

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

646.3713

Manufactured No

Each

13.0000

1

DAS

DAS

646.3713

Gusset

**

6

27

9-89

9-89

Location

Loc Qty

Loc Code

cck105

13

120631

1

138216

12

Each

236.0000

5

**

DAS

DAS

6

27

9-89

9-89

MS24694-S51

Purchased No

MS24694-S51

Screw

Location

Loc Qty

Loc Code

ST284

236

m130928

36

m133990

200

Each

37.0000

1

**

DAS

DAS

6

27

9-89

9-89

AN3-13A

Purchased No

AN3-13A

Bolt

Location

Loc Qty

Loc Code

CA

3

m129682

3

GA

20

m127070

20

ST349

14

m131305

14

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

646.3712

Manufactured No

Each

11.0000

1

646 3712

Clip

DAS

6

9-89

9-89

Location

Loc Qty

Loc Code

cck105

11

101119

1

120630

10

Each

7.0000

1

646.3811

Manufactured No

646 3811

Radius Block

DAS

6

9-89

Location

Loc Qty

Loc Code

CCK106

7

122938

7

Each

229.0000

2

AN3-6A

Purchased No

AN3-6A

Bolt

DAS

6

9-89

Location

Loc Qty

Loc Code

over003

225

M133561

100

M133932

125

ST306

4

M131305

4

Each

130.0000

1

MS24694-S55

Purchased No

MS24694-S55

Screw

DAS

6

9-89

Location

Loc Qty

Loc Code

ST283

130

m132803

47

m133988

83

JAN 26 2016

MS24694-S55

Y2

MS24694-S55

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

646.3610 Manufactured No

Each 0.0000

1

646 3610

Filler

646.3714

Manufactured No

Each 3.0000

1

646 3714

Gusset

Location

Loc Qty

Loc Code

cck105

3

120632

3

Each

968.0000

8

MS20470AD5-6

Purchased

No

MS20470AD5-6

RIVET

Location

Loc Qty

Loc Code

CCK004

890

124089

890

ST309

78

105433

78

Each

1.0000

2

646.3812

Manufactured

No

646 3812

Gusset Bracket

Location

Loc Qty

Loc Code

CCK106

1

138194

1

Each

271.0000

4

AN3-3A

Purchased

No

AN3-3A

Bolt

Location

Loc Qty

Loc Code

ST350

271

m131624

101

m133833

70

m134034

100

140240 DAS 6 9-89

FEB 05 2016

DAS 6 9-89

DAS 6 9-89 JAN 20 2016

140058 DAS 6 9-89 FEB 05 2016

DAS 6 9-89

JAN 26 2016

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

646.3813 Manufactured No

Each 6.0000 1

646 3813

Strut Bracket

[Handwritten Signature]

Location

Loc Qty

Loc Code

CCK106

6

127453

1

138267

5

MS20470AD5-7

Purchased No

Each 509.0000

MS20470AD5-7

Rivet

[Handwritten Signature]

Location

Loc Qty

Loc Code

ST309

509

123425

509

MS21047-3

Purchased No

Each 143.0000

MS21047-3

Nut Plate

[Handwritten Signature]

Location

Loc Qty

Loc Code

over005

100

m133938

100

ST301

43

m133790

43

CCR264SS3-02

Purchased No

Each 388.0000

CCR264SS3-02

Rivet, Cherry

[Handwritten Signature]

Location

Loc Qty

Loc Code

ST321

388

M133790

188

M134023

200

DAS 6 27 9-89

DAS 6 27 9-89

DAS 6 27 9-89

DAS 6 27 9-89

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No

Each 104.0000 2

AN3-5A

Bolt

DAS
6-45
9-89
27
9-89

Location

Loc Qty

Loc Code

FP001

24

m133686

24

ST350

80

m133686

80

2

646.3715 Manufactured No

Each 19.0000 2

646 3715

Strut Doubler

DAS
6-45
9-89
27
9-89

Location

Loc Qty

Loc Code

cck105

19

139892

19

2

MS27039-1-12 Purchased No

Each 191.0000 6

MS27039-1-12

Screw

DAS
6-45
9-89
27
9-89

Location

Loc Qty

Loc Code

over006

100

m133988

100

ST280

91

m133483

91

6

646.3716 Manufactured No

Each 7.0000 1

646 3716

Gauge Bracket

DAS
6-45
9-89
27
9-89

Location

Loc Qty

Loc Code

cck105

7

136410

7

1

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

MS20426AD5-7

Purchased

No

Each

1,059.000

2

MS20426AD5-7

RIVET

**

DAS 6 9-89

Location

Loc Qty

Loc Code

ST311

1059

M132767

16

M133922

1043

MS24694-S54

Purchased

No

Each

58.0000

2

MS24694-S54

SCREW

**

DAS 6 9-89

Location

Loc Qty

Loc Code

ST284

58

m133134

58

MS27039-1-21

Purchased

No

Each

375.0000

4

MS27039-1-21

Screw

**

DAS 6 9-89

Location

Loc Qty

Loc Code

over006

241

m127904

241

ST280

134

m127904

134

MS27039-1-20

Purchased

No

Each

172.0000

2

MS27039-1-20

Screw

**

DAS 6 9-89

Location

Loc Qty

Loc Code

ST280

172

124326

172

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Picklist Print

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-19

Purchased

No

Each

204.0000

22

MS27039-1-19

Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

over006

100

m133932

100

ST280

104

m133134

4

m133938

100

Each

2.0000

1

DAS
27
9-89

646.3717

Manufactured

No

646 3717

Doubler

Location

Loc Qty

Loc Code

cck105

2

120633

2

Each

13.0000

2

DAS
27
9-89

646.3718

Manufactured

No

646 3718

Custom Washer

Location

Loc Qty

Loc Code

cck105

13

136223

13

Each

19.0000

2

DAS
27
9-89

646.3719

Manufactured

No

646 3719

Doubler

Location

Loc Qty

Loc Code

cck105

19

139893

19

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Picklist Print

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-10

Purchased

No

Each

148.0000

2

MS27039-1-10

SCREW

Location

Loc Qty

Loc Code

CA

41

m128635

41

GA

50

m129541

50

ST280

57

m132677

57

AN3-11A

Purchased

No

Each

195.0000

10

AN3-11A

Bolt

Location

Loc Qty

Loc Code

over003

100

m133992

100

ST349

95

m133561

95

600.0990

Purchased

No

Each

26.0000

1

600 0990

Magnabond 6398 Part A

Location

Loc Qty

Loc Code

CA2

12

M133800

12

PKG

14

M133938

12

M131589

2

2/11/2016

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Picklist Print

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

600.0991 Purchased No

Each 26.0000 1

600 0991

MAGNOBOND 6398 PART B

DAS
6
9-89
27
9-89

Location

Loc Qty

Loc Code

CA2

12

m133800

12

PKG

14

m133938

12

m131589

2

2/11/2016

600.1012 Purchased No

Each 25.0000 1

600 1012

Sealant PR1425B2 (#654 sem)

DAS
6
9-89
27
9-89

Location

Loc Qty

Loc Code

cck017

24

m133800

8

m133938

8

m133992

8

cck018

1

m131364

1

10/30/2015

600.0129 Purchased No

f 501.0000 8

600 0129

VHB TAPE 75935A651

DAS
6
9-89
27
9-89

Location

Loc Qty

Loc Code

CCK095

501

m127920

301

m131311

200

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

600.1013 Purchased No

Each 850.0000 5

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

DAS 27
6 9-89
9-89

Location

Loc Qty

Loc Code

CCK095

850

m131145

850

6/15/2016

5

646.3910 Manufactured No

Each 32.0000 4

646 3910

Shim

DAS 27
6 9-89
9-89

Location

Loc Qty

Loc Code

CCK106

32

136478

32

4

646.3911 Manufactured No

Each 61.0000 1

646 3911

Shim

DAS 27
6 9-89
9-89

Location

Loc Qty

Loc Code

cck104

17

126229

17

CCK106

44

126059

44

4

646.3912 Manufactured No

Each 16.0000 4

646 3912

Shim

DAS 27
6 9-89
9-89

Location

Loc Qty

Loc Code

cck023a

10

124501

10

CCK106

6

123143

6

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Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

646.3913 Manufactured No

Each 100.0000 1

DAS

646 3913

Shim

**

6
9-89

6
9-89

Location

Loc Qty

Loc Code

cck023aq

81

126060

81

CCK106

19

124108

19

AN3-12A

Purchased No

Each 87.0000

DAS

AN3-12A

Bolt

**

6
9-89

6
9-89

Location

Loc Qty

Loc Code

GA

2

m129682

2

ST349

85

m133064

16

m133234

69

MS27039-1-16

Purchased No

Each 318.0000

DAS

MS27039-1-16

Screw

**

6
9-89

6
9-89

Location

Loc Qty

Loc Code

ST280

318

m131317

18

mm134023

300

650.9201

Manufactured No

Each 13.0000

650 9201

Eyelet Bracket Assembly

**

DAS

6
9-89

Location

Loc Qty

Loc Code

cck127

13

136606

13

JAN 25 2016

Picklist Print

Page 16

January 22, 2016 1:48:44 PM

Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

AN44-5A

Purchased

No

Each

26.0000

2

AN44-5A

Eyebolt

Location

Loc Qty

Loc Code

ST339

26

m133134

2

m133790

12

m133990

12

AN665-34R

Purchased

No

Each

48.0000

2

AN665-34R

Clevis

Location

Loc Qty

Loc Code

ST330

48

M133523

28

M134029

10

st330

10

AN4C7A

Purchased

No

Each

106.0000

2

AN4C7A

BOLT

Location

Loc Qty

Loc Code

OVER002

20

m133523

20

ST340

16

m133363

16

ST345

70

m133790

20

m133990

50

JAN 25 2016

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Picklist Print

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Page 17

Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

Each

1,618.000

4

NAS1149F0432P

WASHER

DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

ST260a

1000

M133990

1000

ST262

493

M133938

493

st268

125

M132677

125

Each

2,182.000

2

DAS 6 27
9-89 9-89

MS21042L4

Purchased

No

MS21042L 4

Locknut

Location

Loc Qty

Loc Code

FP001

41

m133363

41

GA

26

m127813

26

ST303

2018

m133769

2018

ST305

97

m130922

97

Each

79.0000

2

DAS 6 27
9-89 9-89

AN316C4R

Purchased

No

AN316C4R

NUT

Location

Loc Qty

Loc Code

ST331

79

m133234

43

m133523

36

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Picklist Print

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January 22, 2016 1:48:44 PM

Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042-3 MS21042L3 Purchased No

Each 18.0000

MS21042-3

Nut / use MS21042L3

[Handwritten signature]

Location

Loc Qty

Loc Code

ST304

18

M129682

18

MS27039-08-13 Purchased No

Each 318.0000

MS27039-08-13

Screw

[Handwritten signature]

Location

Loc Qty

Loc Code

ST278

318

124326

318

MS21042-08 MS21042L08 Purchased No

Each 33.0000

MS21042-08

USE MS21042L08

[Handwritten signature]

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

NAS1149FN832P Purchased No

Each 3,821.000

NAS1149FN832P

Washer

[Handwritten signature]

Location

Loc Qty

Loc Code

GA

2231

M133316

16

M133769

2215

ST262

1590

M133709

1590

2
133790

DAS
6
9-89
27
9-89

2

DAS
6
9-89
27
9-89

2

2
133922

DAS
6
9-89
27
9-89

4

DAS
6
9-89
27
9-89

4

JAN 25 2016

January 22, 2016 1:48:44 PM

Shop Packet Print

Page 18

Picklist Print

Page 19

January 22, 2016 1:48:44 PM

Work Order ID: 140901

140901

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/22/2016

Required Date: 2/19/2016

Start Qty: 1.00

Required Qty: 1.00

MS24693-C278

Purchased

No

Each

75.0000

5

DAS

6

9-89

MS24693-C278

Screw

S

Location

Loc Qty

Loc Code

ST287

75

m133998

75

646.9410

Manufactured

No

Each

0.0000

1

646 9410

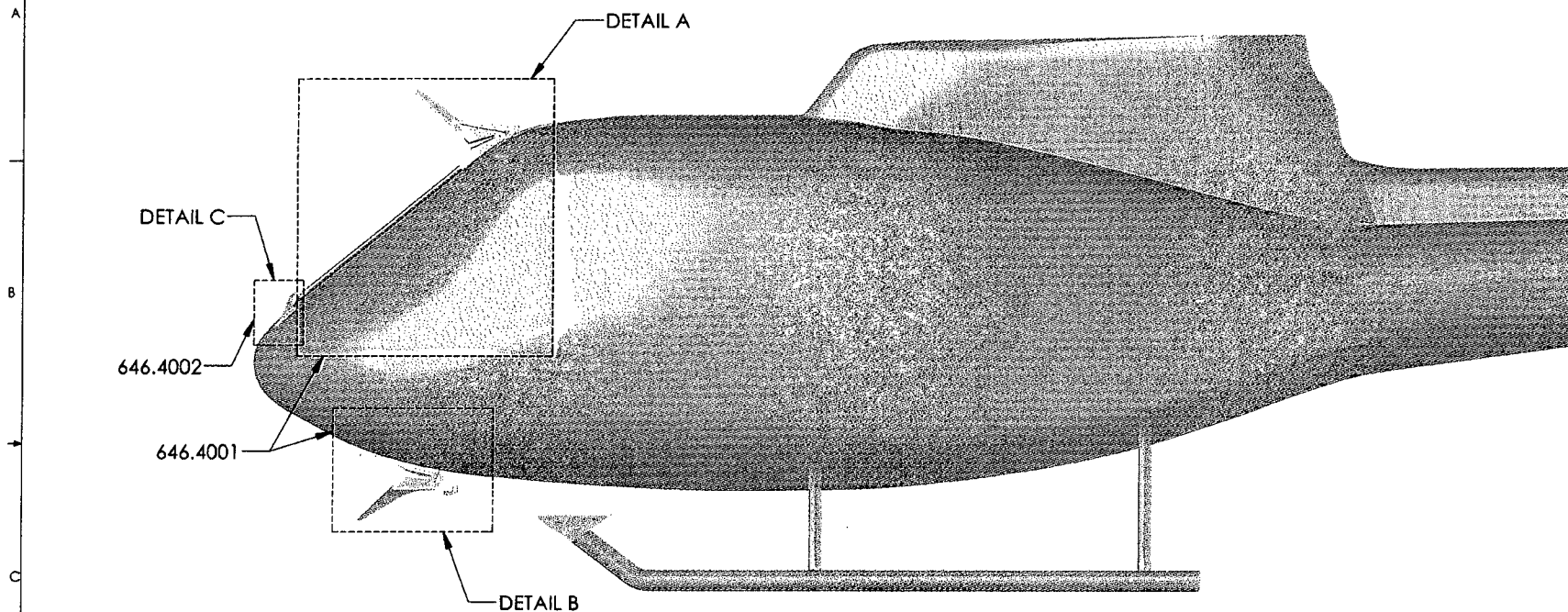
Shim

DAS
10
9-89

See attach E-mail

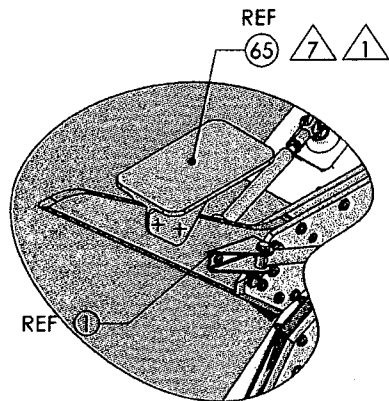
JAN 25 2016

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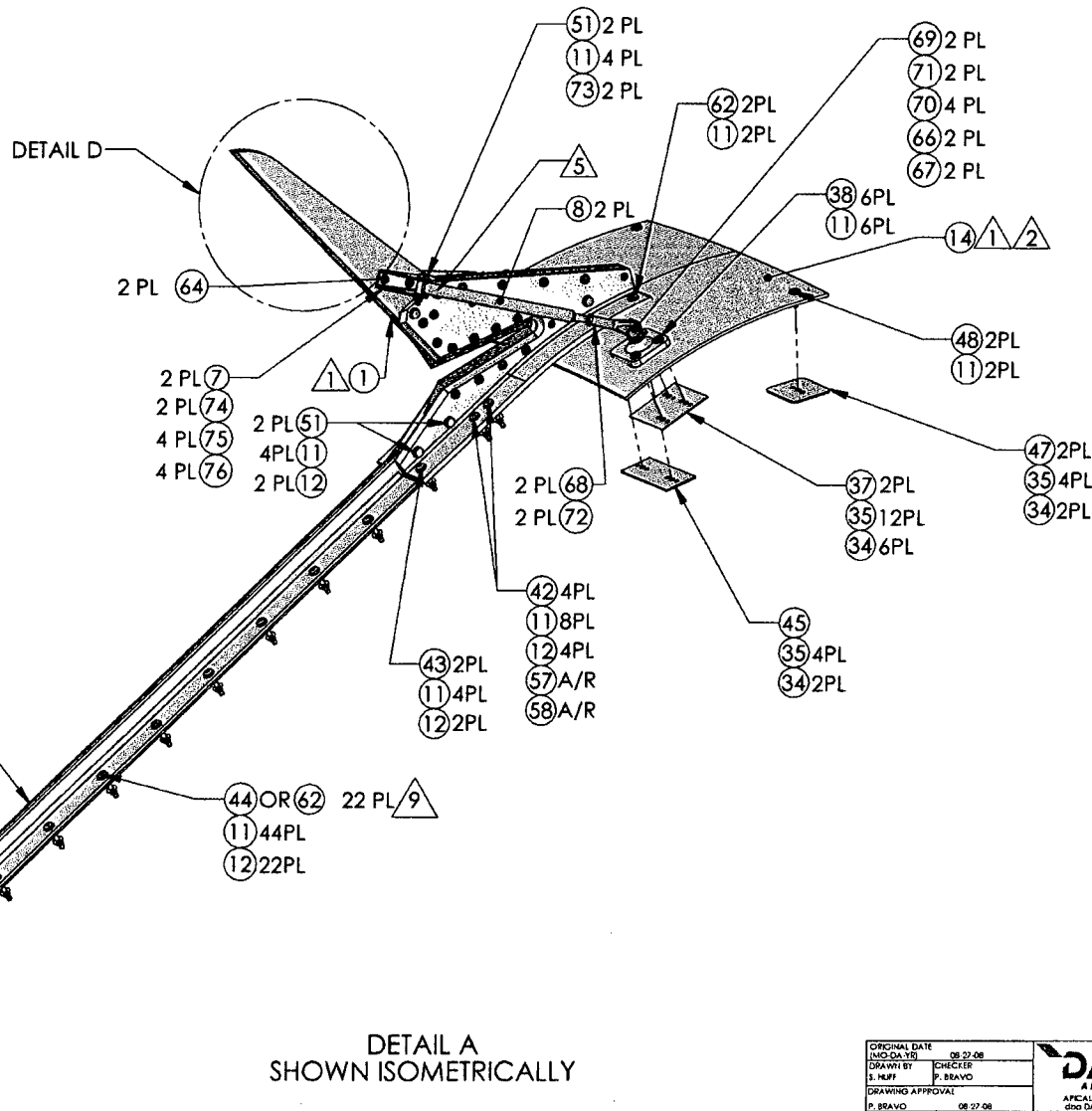


ORIGINAL DATE (MO-DA-YR) 08-27-08		DART 3030 ENTERPRISE CT., SUITE A	
DRAWN BY T. CRECHER S. HUFF		APICAL INDUSTRIES, INC. (DBA DART AEROSPACE)	
DRAWING APPROVAL P. BRAVO 08-27-08		VISTA, CA. 92081 (760)-724-5300	
CONTRACT NO.			
AS350 CABLE CUTTERS KIT			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±0.10 3 PLACE DECIMALS ±0.05 ANGLES ±.5°			
SHEET B	CAGE CODE 07M26	DWG. NO. 646.4000	REV. C
SCALE NONE		SHEET 2 OF 5	

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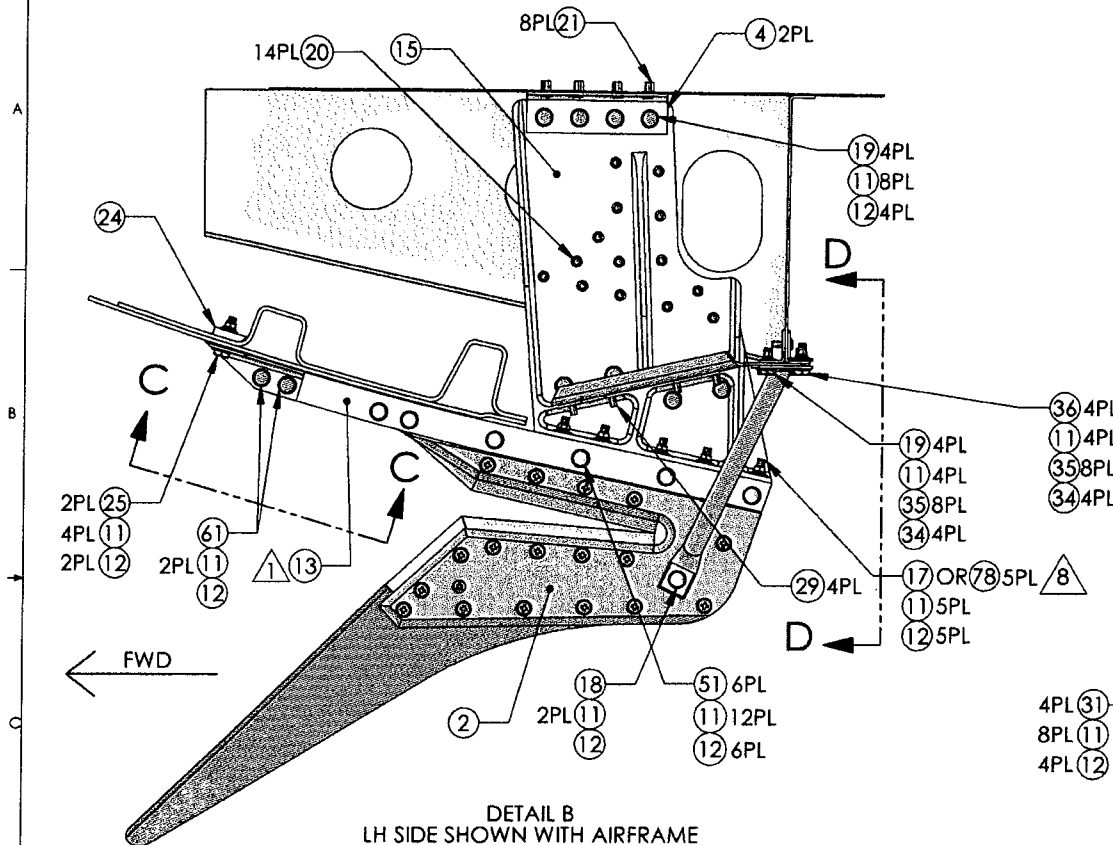
DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION



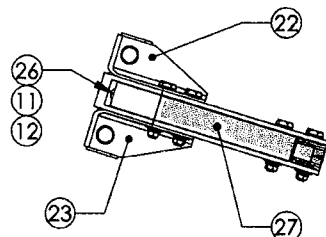
DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE (DD-MY-YR)		08-27-08	
DRAWN BY		CHECKER	
S. HUFF		P. BRAVO	
DRAWING APPROVAL		08-27-08	
P. BRAVO		08-27-08	
CONTRACT No.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°			
DART AEROSPACE		3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760) 724-5300	
AFAS350 CABLE CUTTERS KIT			
SHEET	CAGE CODE	DWG. NO.	REV.
B	07M16	646.4000	C
SCALE NONE		SHEET 3 OF 5	

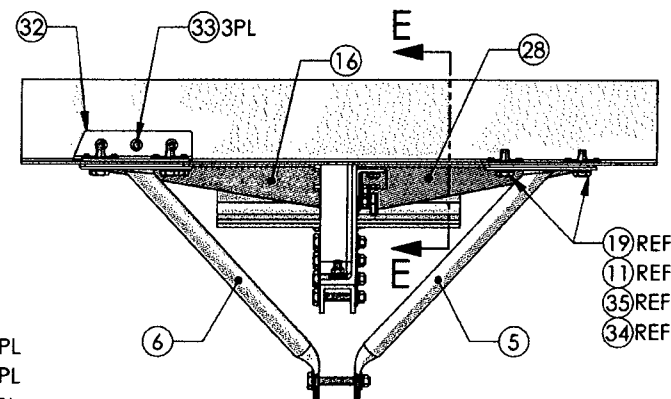
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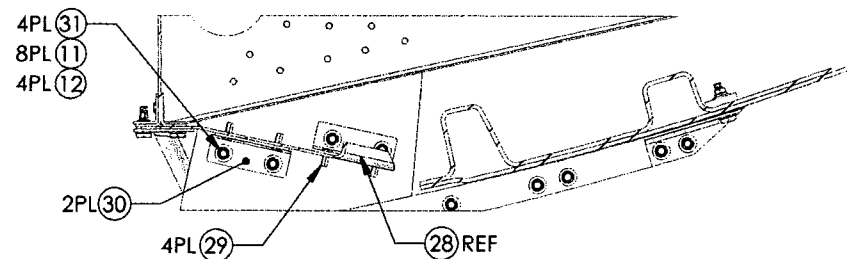
DETAIL B
LH SIDE SHOWN WITH AIRFRAME



SECTION C-C



SECTION D-D
CUTTER HIDDEN FOR CLARITY

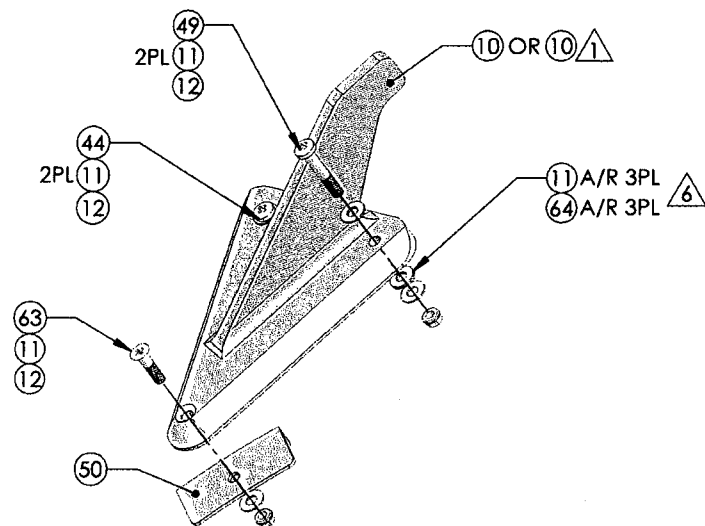


SECTION E-E

ORIGINAL DATE 08-22-08			3030 ENTERPRISE CT SUITE A VISTA, CA, 92081 (760)-724-5300	
DRAWN BY S. HUFF			P. BRAVO	
DRAWINGS APPROVAL P. BRAVO			ADRIAN INDUSTRIES, INC. 3030 ENTERPRISE	
CONTRACT NO.				
AS350 CABLE CUTTERS KIT				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.00 3 PLACE DECIMALS ±.005 ANGLES ±.3°				
SHEET B	CAGE CODE 07M26	DWG. NO. 646.4000	REV. C	SCALE NONE
AS350 CABLE CUTTERS KIT			SHEET 4 OF 5	

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA 92081
(760) 724-5300
APICAL INDUSTRIES INC.
DBA DART AEROSPACE

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DETAIL C
 LH SHOWN EXPLODED
 RH OPPOSITE

ORIGINAL DATE (INC. CA-YR) 08-27-08		DART 3030 ENTERPRISE CT., AEROSPACE SUITE A VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
DRAWN BY S. HUB	CHECKED BY P. BRAVO		
DRAWING APPROVAL P. BRAVO 08-27-08		AS350 CABLE CUTTERS KIT KIT CAGE CODE DWG. NO. REV. B 07M26 646.4000 C SCALE NONE SHEET 5 OF 5	
CONTRACT NO.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±0.01 3 PLACE DECIMALS ±0.005 ANGLES ± 3°	

Work Order ID 140901

January 22, 2016 1:48:38 PM

140901

Page 1

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: AS350 Cable Cutter System

Stop ***NS2***Start Date: 1/22/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 2/19/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:

Process Plan: SHADate: 20160122

Tooling:

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

646.4000

B

100

Document Control

0.00

045

100

DOCUMENT CONTROL

6

DC

Memo

0.00

045

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP 646.4001

MW JAN 26 2016

110

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NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

REFERENCE ONLY

	5		5		78	601.3875	SCREW		
	1		1		77	646.9410	SHIM		
			4		76	601.2764	WASHER		MS2149FH832P
			2		75	601.2973	LOCKNUT		MS21042-08
			2		74	601.2988	SCREW		MS27039-0813
			2		73	601.2943	LOCKNUT		MS21042-3
			2		72	601.3128	NUT		AN316C-4R
			2		71	601.3209	LOCKNUT		MS21042-4
			4		70	601.2638	WASHER		MS21149F0432P
			2		69	601.2669	BOLT		AN4C7A
			2		68	601.3119	CLEVIS		AN665-34R
			2		67	601.3121	EYE BOLT		AN44-5A
			2		66	650.9201	EYE BRACKET ASSY		
	REF	REF		REF	65	647.5701	GPS MOUNT KIT		
				2	64	601.3151	WASHER		MS21149F0363P
					63	601.2911	SCREW		MS24694553
			24		24	601.2637	SCREW		MS27039-1-16
	2		2		2	61	601.2763	BOLT	AN3-12A
			1		1	60	646.3913	SHIM	
			4		4	59	646.3912	SHIM	
			1		1	58	646.3911	SHIM	
			4		4	57	646.3910	SHIM	
			5		5	56	600.1013	PRIMER	
			8 FT		8 FT	55	600.0129	VHB TAPE	
			1	1	1	54	600.1012	SEALANT	PR-1425 CLASS B
			1		1	53	600.0991	MAGNOBOND 639B PART B	
			1		1	52	600.0990	MAGNOBOND 639B PART A	
	6		10		10	51	601.2826	BOLT	AN3-11A
				2		50	646.3814	WIPER BRACKET	
				2		49	601.2910	SCREW	MS27039-1-18
		2		2		48	601.1365	SCREW	MS27039-1-10
		2		2		47	646.3719	DOUBLER	
		2		2		46	646.3718	CUSTOM WASHER	
		1		1		45	646.3717	DOUBLER	
		22	2	22		44	601.1948	SCREW	MS27039-1-19
		2		2		43	601.1952	SCREW	MS27039-1-20
		4		4		42	601.1956	SCREW	MS27039-1-21
.4006	.4005	.4004	.4003	.4002	.4001	FIND #	PART #	DESCRIPTION	MATL
									SPEC.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECH 03199, 03261, 03718 & 03745	03/06/2010	P. BRAVO
B	INCORPORATED ECH 03046, 03079 & 04731	11/04/2014	P. BRAVO
C	INCORPORATED ECH 05098	09/09/2015	P. BRAVO

		2	2	41	601.2829	SCREW	MS24694554
		2	2	40	601.2831	RIVET	MS20426AD5-7
		1	1	39	646.3716	GAUGE BRACKET	
		6	6	38	601.1953	SCREW	MS27039-1-12
	2		2	37	646.3715	STRUT DOUBLER	
	2	2	2	36	601.2824	BOLT	AN3-5A
12	36		36	35	601.2277	RIVET	CC874453-3-07
6	18		18	34	600.0795	NUT PLATE	MS21047-3
3	3		3	33	601.2565	RIVET	MS20470AD5-7
1	1		1	32	646.3813	STRUT BRACKET	
4	4		4	31	601.2822	BOLT	AN3-3A
2	2		2	30	646.3812	GUSSET BRACKET	
8	8		8	29	601.2564	RIVET	MS20470AD5-6
1	1		1	28	646.3714	GUSSET	
	1	1	1	27	646.3610	FILLER	
	3	3	3	26	601.2830	SCREW	MS24694555
	2	2	2	25	601.2825	BOLT	AN3-6A
	1	1	1	24	646.3811	RADIUS BLOCK	
	1	1	1	23	646.3712	CLIP	
	1	1	1	22	646.3711	CLIP	
8	8		8	21	601.2832	RIVET	MS20470AD5-5-8
14	14		14	20	601.2020	RIVET	CR3213-5-3
4	6	4	6	10	601.2823	BOLT	AN3-4A
	1	1	1	18	601.2827	BOLT	AN3-13A
	5	5	5	17	601.2912	SCREW	MS24694551
1	1		1	16	646.3713	GUSSET	
1	1		1	15	646.3210	SUPPORT	
	1		1	14	646.3710	DOUBLER	
	1	1	1	13	646.3110	CHANNEL	
14	10	8	53	6	601.1624	LOCKNUT	MS21042L3
16	32	18	120	16	601.1607	WASHER	MS21149F0332P
			1	10	646.3410	LH WIPER DEFLECTOR	
			1	9	646.3411	RH WIPER DEFLECTOR	
		2	2	8	647.7703	STRUT ASSY	
		2	2	7	647.0112	STRUT BRACKET	
	1	1	1	6	646.3511	STRUT	
	1	1	1	5	646.3510	STRUT	
2	2		2	4	646.3810	BRACKET	
		1	1		646.2910	DEFLECTOR	
	1	1	1		646.3001	LOWER CUTTER ASSY	
		1	1		646.3301	UPPER CUTTER ASSY	
X					646.4006	LOWER CUTTER FIXED PROVISIONS	
	X				646.4005	LOWER CUTTER REMOVABLE PROVISIONS	
		X			646.4004	FIXED PROVISIONS KIT	
			X		646.4003	CABLE CUTTERS KIT WITHOUT FIXED PROVISIONS	
				X	646.4002	AS330 WIPER DEFLECTOR KIT	
				X	646.4001	AS330 CABLE CUTTERS KIT	
.4006	.4005	.4004	.4003	.4002	.4001	FIND #	PART #
						DESCRIPTION	MATL
							SPEC.

QTY	ORIGINAL DATE	08-27-08
NEXT ASSY (S)	DRAWN BY	J. HUFF
	CHECKED BY	P. BRAVO
	DESIGNING APPROVAL	P. BRAVO
	CONTRACT NO.	08-27-08
	UNLESS OTHERWISE SPECIFIED	
	TOLERANCES ARE:	SIZE 6
	1 PLACE DECIMALS .10	
	2 PLACE DECIMALS .01	
	3 PLACE DECIMALS .005	
	ANGLES 1:2	
	SCALE	NONE
	SHEET	1 OF 5
	DWG. NO.	646.4000
	CAGE CODE	07M26
	REV.	C

DART

3030 ENTERPRISE CT., SUITE A
VISTA, CA 92081
(760)-724-5300

APICAL INDUSTRIES, INC.
DBA DART AEROSPACE

AS330 CABLE CUTTERS KIT

Shirley Hay

From: David Duval
Sent: February 16, 2016 11:22 AM
To: Shirley Hay; Mario Poulin
Subject: FW: 646.9410 Shim

DAVID DUVAL
Production Engineering Coordinator

From: David Duval
Sent: February-03-16 1:58 PM
To: Mario Poulin <mpoulin@dartaero.com>
Subject: FW: 646.9410 Shim

Got it

DAVID DUVAL
Production Engineering Coordinator

From: Mario Poulin
Sent: January-07-16 2:02 PM
To: David Duval <dduval@dartaero.com>
Subject: FW: 646.9410 Shim

Fyi,

Not a show stopper for now, CCK350 (Shim)

Mario,

From: Marc Bellavance
Sent: Thursday, January 07, 2016 1:40 PM
To: Mario Poulin <mpoulin@dartaero.com>
Subject: FW: 646.9410 Shim

Hey Mario,

Here's your answer. I'm thinking that if a customer is requiring a shim we can follow up with a no charge shim or advise that he fabricate his own.

Marc

From: Jacob Becker
Sent: January-07-16 1:12 PM
To: Marc Bellavance <mbellavance@dartaero.com>; Lisa Mansfield <lmansfield@dartaero.com>

Cc: Mario Poulin <mpoulin@dartaero.com>; Sian Willems <swillems@dartaero.com>
Subject: RE: 646.9410 Shim

It's not a show stopper. Currently we advise the customer that they need to shim it if OEM provisions are installed. I have just now included the shim in the kit.

Jacob

From: Marc Bellavance
Sent: Thursday, January 07, 2016 8:59 AM
To: Lisa Mansfield <lmansfield@dartaero.com>; Jacob Becker <JBecker@dartaero.com>
Cc: Mario Poulin <mpoulin@dartaero.com>; Sian Willems <swillems@dartaero.com>
Subject: 646.9410 Shim

Lisa/Jacob,

You guys have introduced this laminated aluminum shim as part of our AS350 CCK kits for use when installing in conjunction with OEM fixed provisions. Seems like we're having a hard time sourcing this part and/or with its manufacturing (cutting this on the waterjet to 0.50" wide is far from ideal). Is this something you guys have in stock or can acquire easily? Also, is this a show stopper for all orders in WIP and others about to ship?

Please advise.

Thanks,
Marc